

PRODUCT CHARACTERISTIC SHEET and COC

1000100212-5

PLEASE READ BEFORE USING!

Material: CONVEX® High-Bond Matte For Solvent Ink Jet Printers

Part Nos: CHBM62050W, CHBM63050W, CHBM66050W

General Description: White, soft, flexible vinyl with a clear permanent acrylic adhesive. Convex® Matte base materials are intended to be used for printing with Solvent & Eco-Solvent Ink Jets. Different combinations of Convex® or Pro-Shield™ laminates can be used to achieve a variety of decal thicknesses. Please see the disclaimer at the bottom.

Thickness: 4 mil. vinyl with 2 mil of adhesive

Outdoor Life: 6 years

Shelf Life: 2 years stored at 70 F & 50%RH

Service Temperature Range: (-40° F to 176° F)

Minimum Application Temp.: 50° F

Adhesive Properties:

2 mils. of permanent acrylic pressure sensitive adhesive works for most surfaces including textured low energy plastic and metal surfaces

Tests performed | results:

| Ultimate Peel from | Average OZ/IN | Test Method |
|--|---------------|---|
| Acrylic | 150 | ASTM D 903 (Modified for 72 hour dwell time) |
| Glass | 156 | |
| Polypropylene | 32 | |
| Stainless Steel | 134 | |
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| Expected Shear Room Temp (hours) | 30 | ASTM D 3654 Method A a. 1 hrl dwell b. 1 sq. in. surface c. 4 lb. load |
| Tack (gm/sq cm) | 1100 | ASTM D 2979 |

CERTIFICATE OF CONFORMANCE (COC)

| | | | |
|------------------|-------------------------|------------------------------------|---------------------------|
| Sold to: | | Lot No.: | 1000100212-5 |
| Buyer: | | PO# | |
| | | Supplier's Authorized Rep.: | <i>Demas Garcia</i> |
| Supplier: | Graphic Marking Systems | MFR Part No: | Top of the page |
| | | Title: | Converting Manager |
| MFR Date: | 10/12/12 | Ship Date: | |
| | | Date: | 10/12/12 |

Recommended Application Techniques:

On curved surfaces such as helmets, apply rubbing from the center out. When Convex Laminate is separated from the liner it is unsupported and can stretch during the laminating process. If there is too much reverse tension applied on the supply roll it will stretch and curl up immediately when it is cut. Laminate with a cold pressure sensitive laminator or by hand.

RIP Software Settings:

Although we do not offer specific profiles for ink jet printers on this material, we have found that most RIPS do offer generic matte white vinyl profiles that require minimal adjustments to get acceptable results. The user must determine what is acceptable for the desired application

USE A 45° blade or 60° BLADE on any combination of material 8 mil or thicker.

Disclaimer:

All of the descriptive information listed above is our recommendation only. This information does not suggest or constitute a written or verbal warranty or guaranty of any kind by the manufacturer or distributor of this product. Although this material can be printed on with some solvent based printers, the surface characteristics of the material can change from roll to roll, and failure of optimal printing results are not a basis for returning the product. Purchasers of this product shall be responsible for independently determining the suitability of the material for the intended application. GMS0612 Graphic Marking Systems

Material Safety Data Sheet (MSDS)

| | | | |
|---|--|--|--------------------------|
| Material Name: CONVEX® High-Bond Matte | | Company: Graphic Marking Systems Address: 28457 N. Ballard Rd., Suite A1 Lake Forest, IL 60045 Phone: 847-582-9276 Fax: 847-582-9282 | |
| Part Nos: CHBM62050W, CHBM63050W, CHBM66050W | | | |
| Date Prepared: 9/28/2011 | | | |
| General Description: Matte White, soft, flexible vinyl with a clear permanent acrylic adhesive. | | | |
| Composition and information on ingredients: Individual components of this product do not contribute to any known hazards. OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200): NONE | | UL Recognized: | NO |
| | | ROHS Compliant: | YES |
| | | REACH Compliant: | YES |
| Hazards Identification: | | | |
| POTENTIAL HEALTH EFFECTS: None | | | |
| ACUTE: No significant toxic hazard. When burned may produce toxic fumes. | | | |
| CHRONIC: No significant toxic hazard. | | | |
| None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA, or ACGIH as a carcinogen. | | | |
| First Aid Measures: | | Fire Fighting Measures: | |
| Emergency and First Aid Procedures: | | Flash Point: N/A | |
| ROUTES OF ENTRY: | | Method Used: N/A | |
| Inhalation: N/A Skin: N/A | | Auto-ignition Temperature N/A | |
| Eyes: N/A Ingestion: N/A | | Flamable limits in Air % by Volume: LEL: N/A, UEL: N/A | |
| Accidental Release Measures: N/A | | Extinguishing Media: Multi-rated ABC extinguisher or water | |
| Handling and Storage: No special handling required other than storing away from excessive heat sources. | | Unusual Fire and Explosion Hazards: None | |
| Exposure Controls and Personal Protection: | | Special Fire Fighting Procedures: In case of fire, use self-contained breathing apparatus and full protective equipment - all fires liberate toxic gases. | |
| Respiratory Protection: None required | | Physical and Chemical properties: | |
| Skin Protection: No precautions required | | Vapor Pressure (mm Hg) N/A | Boiling Point: N/A |
| Eye Protection: None required | | Vapor Density (air = 1): N/A | Melting Point: N/A |
| Exposure Guidelines: None established | | Appearance and odor: N/A | Reactivity of water: N/A |
| Engineering Controls: None required | | Specific Gravity (H 0=1) N/A | Solubility in water: N/A |
| Toxicological Information: | | Stability and Reactivity: | |
| Carcinogen Status: NTP: NONE IARC: NONE OSHA: NONE | | Stability: N/A | |
| Ecological Information: No Data Availble | | Conditions to avoid: Fire or Excessive Heat | |
| Transport Information: | | Incompatibility: None | |
| TRANSPORTATION AND HAZARDOUS MATERIALS DESCRIPTION: Not a hazardous material for DOT shipping. | | Hazardous Decomposition Products: None | |
| Disposal Considerations: Waste Disposal: Dispose of in accordance with Local, State and Federal regulations. | | Hazardous Polymerization: Will not occur. | |
| Other Information: The information contained herein is based on the data available to Graphic Marking Systems, and is believed to be correct. However, Graphic Marking Systems makes no warranty, expressed or implied, regarding the accuracy of these data or the results to be obtained from the use thereof. Graphic Marking Systems assumes no responsibility for injury from the use of the product described herein. | | Regulatory Information: | |
| | | OSHA STANDARD CFR 29, PART 1910.1200: This product is considered to be an "article" under this standard. | |
| | | SARA 313 INFORMATION: This product contains no substances at or above the reporting threshold subject to the reporting requirement of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 371, based on available data. | |
| | | CALIFORNIA PROPOSITION 65: CALIFORNIA PROPOSITION 65: The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986. Warning this product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm. | |